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Workers at Reynolds center taste, evaluate, analyze cigarettes

WINSTON-SALEM (AP) — Water and unsalted crackers stand ready to cleanse the palates of volunteers who will smoke three cigarettes and compare them like fine wines.

Nearby, six smoking machines each puff on 20 cigarettes at a time as the filter pads behind them grow brown with tar.

It's all part of the Bowman Gray Technical Center, the newly expanded, 700-employee, \$56 million research and development facility of the R.J. Reynolds Tobacco Co.

"There are people in the company known for their discriminating palates," Dr. Bill Clapp, planning manager for the facility, said during on a recent tour of the building and its "sensory evaluation" center.

Outside observers aren't allowed to watch the panelists, company employees who volun-

teer for the duty, because they have to concentrate, Clapp said.

Each of the 20 booths in the tasting center — 10 for menthol and 10 for regular — has a little window and a table for the crackers, a cup of water and note paper.

The smoking machines take a two-second puff of 35 cubic centimeters per cigarette per minute, all the way down to a precise 3 millimeters from the butt. While the company maintains that the tar and nicotine collected there and measured have never been proven to cause lung cancer or other diseases, officials say they still have to know the proportions in each type of cigarette.

"We are required by law to put the numbers on each pack, and we want them to be accurate," said company spokeswoman Betsy Annese.

The facility also has a smoking

and health group that is off-limits to visitors. But a company publication about the center says the section provides Reynolds with "information to address smoking and health issues."

"As a manufacturer of tobacco products, Reynolds cannot ignore the continuing, unresolved controversy surrounding smoking and health," it says.

Ms. Annese said the section concentrates not on testing smoking's effects on individuals but rather on gathering and reviewing published materials on it.

Scientists in another section probe the physiological, psychological and behavioral aspects of smoking.

"That's one of those confidential areas," said Ms. Annese. But the Reynolds publication says: "Among the fundamental questions the group is trying to answer are why people smoke, how they

smoke and how smoking behavior is affected by the properties of smoke."

Reynolds and other tobacco companies maintain cigarettes are not addictive.

There is also an airtight chamber that researchers use to test the effects of smoking on the surrounding environment, Clapp said. A cigarette machine does the smoking while various instruments test the atmosphere inside.

"In back of that room is a one-half of \$1 million mass spectrometer so sensitive that if you just put your hand in front of it, it can tell if you're a smoker," he said.

Researchers and volunteers also analyze competitors' cigarettes, not only for tar and nicotine but also for taste, said Ms. Annese.

Other researchers are looking for ways to control the cigarette

beetle, one of the major pests afflicting tobacco. Much of the information Reynolds gleans is given to agricultural extension departments, Clapp said.

All the information from the various sections is channeled into a large computer room, complete with bins marked "classified waste."

"A lot of what they do is confidential," Ms. Annese said. "It's proprietary — we don't want competitors to get hold of it. Most cigarettes have a recipe all their own."

Company officials also declined to reveal any specific smoking-health findings coming from the center, which is secured during off-hours by camera-equipped electronic locks that open only to employees whose face matches the photo on their identification card.

Cigarette foes say one purpose

of the 50 product-liability suits now pending against tobacco companies is to force them to disclose the results of their own research on smoking's effect on health.

"We want to make those documents available. We think they're going to reveal the level of knowledge that companies have — what they actually knew when — and what they did about it," said Richard Daynard, co-chairman of the Tobacco Products Liability Project.

But Reynolds president Gerald H. Long said the lack of growth in the domestic cigarette market was the major impetus behind the research and development center.

"In the years to come, market share growth must come by taking it away from competition," he said when the center was dedicated last month. "The battle for industry leadership is won in the research laboratory."

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